

REMARKS

In response to the Official Action of April 2, 2008, claims 1 and 35 have been amended and claims 11, 24, 26, and 28 have been canceled. No new matter is added.

Claim Rejections - 35 USC §101

At section 9, claims 13 and 22 are rejected under 35 USC §101 as directed to non-statutory subject matter on the grounds that the claims are directed to a software product. Applicant respectfully disagrees.

Claims 13 and 22 are specifically directed to a "software program product" which is defined in the application as storing software code for running in a processing component (specification, page 6, lines 17-33). This software program product is specifically for realizing the actions recited in the methods as set forth in claims 1 and 17. Thus, a "software program product" has a particular meaning as set forth in the specification of the application; which meaning must be considered by the Office.

As has been established in *Phillips v. AWH Corporation*, 415 F.3d 1303, 1326, 75 USPQ 2d 1321 (Fed. Cir. 2005), claim terms are to be given a meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention; that is, as of the effective filing date of the patent application; and:

"[i]mportantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification."

Thus, the meaning of "software program product" has a particular meaning as set forth in the specification, that meaning being an article of manufacture for storing software code which, to anyone of ordinary skill in the art, necessarily implies some type of readable medium for execution by the recited processing component as shown in Figure 4 of the application. An article of manufacture is statutory subject matter (35 USC §101) and the Interim Guidelines for the Examination of Patent Applications for Patent Subject Matter Eligibility makes clear that such a readable medium storing software code for execution by a processing component defines patentable subject matter.

Here, the methods recited in claims 1 and 17 are clearly statutory subject matter and, consequently, a "software program product" as defined in the specification being an article of manufacture that stores software code for execution by a processing component for carrying out these methods thereby defines statutory subject matter.

Reconsideration of the rejection of claims 13 and 22 as directed to non-statutory subject matter is therefore earnestly requested.

Claim Objections

At section 10, claims 1-9, 13, and 35 are objected to, because of informalities noted in claims 1 and 35. The informality noted in claim 1 is believed to be incorrectly identified. Specifically, the Office states that claim 1 contains the language "which point to point", which the Office states should be "while multicasting on point to point". In fact, claim 1 recited "which point-to-multipoint". Amendment has been made to recite "while multicasting on a point-to-multipoint...".

Similarly, the objected to language in claim 35 is not "which point to multipoint" but rather "which point-to-point". Amendment has been made to claim 35 to recite "while multicasting on a point to point...".

It is therefore respectfully submitted that the amendments to claims 1 and 35 overcome the informalities as they are believed to be understood.

Claim Rejections - 35 USC §103

At section 2, claims 1, 2, 5, 6, 8, 10, 12,¹ 23, 27, and 28 are rejected under 35 USC §103(a) as unpatentable over US patent application publication 2003/0220119 Terry (hereinafter Terry I), in view of US patent 5,572,678, Homma.

With respect to claim 1, the Office states that Terry I teaches a method comprising at a mobile station determining a link quality of the point-to-multipoint channel based on link quality related measurement on said point-to-multipoint channel, which point-to-multipoint channel is currently used by said mobile communication network for transmitting multicast data. It is further stated that Terry I does not explicitly call for "sending a request to said mobile communication network to transmit said

¹ Although the Office does not list claim 12 at page 2 of the Action, it does reject claim 12 based on Terry I and Homma.

multicast data via a point-to-point channel in case said determined link quality lies below a give[n] link quality". The Office goes on to assert that Homma teaches sending a request to said mobile communication network to transmit said multicast data via a point-to-point channel in case said determined link quality lies below a give[n] link quality and that it would be obvious to one of ordinary skill in the art at the time of the invention to add the sending a request to said mobile communication network to transmit said multicast data via a point-to-point channel in case said determined link quality lies below a give[n] link quality of Homma to the system of Terry I in order to build a system which can recover when message is corrupted or lost. Applicant respectfully disagrees.

More particularly, Terry I does not disclose that a mobile station sends a request to switch from a point-to-multipoint channel transmission to a point-to-point channel transmission. It only discloses sending channel quality measurements of a HS-DSCH to a network element.

Terry I does moreover not disclose sending link quality related data for enabling a decision on such a switch at the network side. Rather, channel quality measurement results are provided only as a basis for selecting a modulation and coding set (MCS) for the point-to-multipoint transmission (paragraph [0025]). Figure 3 of Terry I, to which the examiner refers, only shows that the channel quality measurement processor 30 provides values to an MCS selection device 28, not to any switching or scheduling mechanism like mechanism 46 of Figure 4. The criteria for switching between point-to-point and point-to-multipoint in Terry I are indicated in paragraphs [0027]-[0029]. They include QoS requirements (i.e. predetermined values) not estimated link quality (i.e. a situation dependent value). Thus, there is absolutely no link in this document between link quality measurements and a switching from point-to-multipoint to point-to-point.

The missing features are also not disclosed by Homma. Homma only suggest that a mobile station transmits a retransmission request in case of a drop-out of an information frame.

Thus, there is no suggestion to enable a mobile station to request a switch from point-to-multipoint to point-to-point based on a determined link quality. Consequently, claim 1 is not suggested by Terry I in view of Homma.

For the same reasons as presented above with regard to claim 1, independent apparatus claim 10 and independent apparatus claim 27 are also believed to be patentable over Terry I in view of Homma.

Since claims 1 and 10 are believed to be patentable over the cited art, it is respectfully submitted that dependent claims 2, 5, 6, 8, 12, and 22 are also allowable at least in view of such dependency.

At section 3, claims 16, 35, and 36 are rejected under 35 USC §103(a) in view of Terry I, in view of US patent 6,810,236, Terry (hereinafter Terry II).

With respect to claim 16, the Office asserts that Terry I discloses the actions of receiving, estimating and ordering as set forth in claim 16, but does not expressly disclose requesting from the mobile measurement results of link quality. The Office goes on to assert that Terry II teaches requesting from the mobile measurement results on link quality and that it would be obvious to add the requesting from the mobile measurement results on link quality of Terry II to the system of Terry I in order to determine the best uses of the resources. Applicant respectfully disagrees.

Claim 16 requires that a network requests measurement results from a mobile station. As conceded by the Office, this action is not disclosed in Terry I.

Claim 16 moreover requires that a network receives measurement results for link quality related measurements on a point-to-point channel. Terry I, however, only discloses receiving channel measurements on a HS-DSCH, and thus a point-to-multipoint channel (paragraph [0025]).

Claim 16 moreover requires that a network estimates a link quality of a point-to-multipoint channel based on measurement results for a point-to-point channel. There is no hint in Terry I at such a cross-wise estimation of a link quality for one type of channel based on measurement results on another type of channel.

Claim 16 moreover requires that the estimated link quality is used as a basis for deciding on whether a mobile station is to be ordered to switch from a point-to-point reception to point-to-multipoint reception. Terry I does not disclose any link between channel measurements and a switch between point-to-point and point-to-multipoint. Rather, channel quality measurement results are provided only as a basis for selecting a modulation and coding set (MCS) for the point-to-multipoint transmission (paragraph [0025]). Figure 3 of Terry I, to which the Office refers, only shows that the channel

quality measurement processor 30 provides values to an MCS selection device 28, not to any switching or scheduling mechanism. The criteria for switching between point-to-point and point-to-multipoint in Terry I are indicated in paragraphs [0027]-[0029]. They include Quality of Service (QoS) requirements (i.e., predetermined values) not estimated link quality (i.e. a situation dependent value). Thus, there is no link in Terry I between link quality measurements and a switching from point-to-multipoint to point-to-point.

The only one of the above indicated features of claim 16 missing from Terry I that might be known from Terry II is that a communication network requests and receives channel quality measurements from a mobile station. This is also the only feature of Terry II that is assumed by the Office to provide a contribution to the approach of claim 16. However, as indicated above, there are various other features of claim 16 that are not disclosed by Terry I, and these features are also not disclosed by Terry II.

It is therefore apparent that the features of claim 16 are quite different from the teachings of Terry I and Terry II, and thus claim 16 is not suggested by Terry I in view of Terry II.

For similar reasons as those presented above, it is respectfully submitted that independent apparatus claim 35 is also distinguished over Terry I and Terry II.

With respect to independent apparatus claim 36, it is respectfully submitted that for the reasons presented below with regard to the rejection of claim 34 in view of Terry I, that claim 36 is not suggested by Terry I in view of Terry II since Terry II does not make up for the recited deficiencies in Terry I as those deficiencies are pointed out below.

The rejection of claim 26 at section 4 is moot since claim 26 has been canceled.

At section 6, claim 9 is rejected under 35 USC §103(a) in view of Terry I further in view of Homma further in view of US patent application publication 2001/0046877, Ohkubo. Claim 9 ultimately depends from claim 1 and is therefore believed to be allowable at least in view of such dependency.

At section 7, claims 13 and 22 are rejected under 35 USC §103(a) in view of Terry I further in view of Homma further in view of US patent 6,571,112, Ramaswamy.

Claims 13 and 22 respectively depend from claims 1 and 17 and are therefore believed to be allowable at least in view of such dependency.

Claim Rejections - 35 USC §102

At section 5, claims 17, 19-21, 25, 29 and 34 are rejected under 35 USC §102(e) as anticipated in view of Terry I.

With respect to claim 17, it is asserted that Terry I teaches a method having the actions recited therein. Applicant respectfully disagrees.

Claim 17 requires estimating a link quality of a point-to-multipoint channel while transmitting multicast data on a point-to-point channel to a mobile station. This is not disclosed by Terry I. In Terry I, the channel quality measurement processor 30 recovers channel quality measurements from users of a HS-DSCH (paragraph [0025]), and thus while transmitting multicast data on a point-to-multipoint channel. Only the feedback from the mobile stations providing the measurement results might be considered point-to-point transmission.

Claim 17 moreover requires using an estimated link quality as a basis for deciding on a switching from a point-to-point channel to a point-to-multipoint channel. It is not disclosed by Terry I that the collected quality measurements (or any derived estimates) are used for such a purpose. In Terry I, the collected quality measurements are only used for selecting an MCS for a point-to-multipoint transmission (paragraph [0025]). Figure 3 of Terry I, to which the Office refers, only shows that the channel quality measurement processor 30 provides values to an MCS selection device 28, not to any switching or scheduling mechanism. The criteria for switching between point-to-point and point-to-multipoint in Terry I are indicated in paragraphs [0027]-[0029]. They include QoS requirements (i.e., predetermined values) not estimated link quality (i.e., a situation dependent value).

It is therefore apparent that the features of claim 17 are quite different from the teachings of Terry I, and that claim 17 is not anticipated by Terry I.

For similar reasons as those presented above with respect to claim 17, it is respectfully submitted that independent apparatus claim 19 and independent apparatus claim 29 are also not anticipated by Terry I.

With respect to claim 34, this claim is similar to claim 17 for a method at a mobile station side. Furthermore, in claim 34 link quality related measurements on a point-to-point channel are performed. Terry I only discloses channel quality measurements by users of a HS-DSCH (Terry I, paragraph [0025]) and thus on a point-to-multipoint channel unlike claim 34. As a result, claim 34 is not anticipated by Terry I.

Dependent claims 20, 21, and 25 are also not anticipated by Terry I at least in view of such dependency.

Allowable Subject Matter

It is noted that claims, 3, 4, 18, 30, and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. These claims are believed to be allowable in their current dependent form in view of the above arguments presented with respect to the independent claims from which they ultimately depend.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

The undersigned respectfully submits that no fee is due for filing this Amendment. The Commissioner is hereby authorized to charge to deposit account 23-0442 any fee deficiency required to submit this paper.

Respectfully submitted,



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